

# Proceedings of the Iowa Academy of Science

---

Volume 72 | Annual Issue

Article 29

---

1965

## Pheasant Farms in Iowa

David J. Roslien  
*Iowa State University*

Arnold O. Haugen  
*Iowa State University*

*Let us know how access to this document benefits you*

Copyright ©1965 Iowa Academy of Science, Inc.

Follow this and additional works at: <https://scholarworks.uni.edu/pias>

---

### Recommended Citation

Roslien, David J. and Haugen, Arnold O. (1965) "Pheasant Farms in Iowa," *Proceedings of the Iowa Academy of Science*, 72(1), 187-196.

Available at: <https://scholarworks.uni.edu/pias/vol72/iss1/29>

This Research is brought to you for free and open access by the Iowa Academy of Science at UNI ScholarWorks. It has been accepted for inclusion in Proceedings of the Iowa Academy of Science by an authorized editor of UNI ScholarWorks. For more information, please contact [scholarworks@uni.edu](mailto:scholarworks@uni.edu).

- Curtis, J. T. 1959. The vegetation of Wisconsin. Uni. Wis. Press. Madison, Wisconsin. 657 p.
- Ennis, J. Harold. 1962. The county conservation program in Iowa. Proc. Iowa Acad. Sci. 69: 218-21.
- Friesner, R. C. and J. E. Potzger. 1934. Climax conditions and ecological status of *Pinus strobus*, *Taxus canadensis*, and *Tsuga canadensis* in the Pine Hills region of Indiana. Butler Univ. Bot. Studies 3: 65-82.
- McIntosh, R. P. 1950. Pine stands in southwestern Wisconsin. Trans. Wisconsin Acad. Sci. 40: 243-57.
- Smith, S. Galen. 1963. Natural area conservation in Iowa. Proc. Iowa Acad. Sci. 70: 191-95.
- Thorne, R. F. 1964. Relict nature of the flora of White Pine Hollow Forest Reserve, Dubuque County, Iowa. Iowa, State Uni., Studies Nat. Hist. 20(6): 1-33.

## Pheasant Farms in Iowa<sup>1</sup>

DAVID J. ROSLIEN<sup>2</sup> AND ARNOLD O. HAUGEN<sup>3</sup>

**Abstract:** An investigation of privately owned pheasant farms in Iowa was conducted from 1960 to 1963. The objectives of the study were to locate all pheasant farms in the state and to study the distribution, size, annual production and years of operation of these farms. The majority of pheasant breeding operations were located in the southern half of Iowa. A total of 254 individuals reared pheasants during the study, but only 31 pheasant farms operated continuously from 1960 to 1963. The average number of farms per year was 119. A total of 84,943 pheasants was produced during the study. Large pheasant farms (over 500 birds) comprised 5% of the total number of farms, but produced 82% of the pen-reared pheasants. Most pheasant farms (88%) produced fewer than 100 birds each year. An average of 43% of the operators reared pheasants for the first time in each of the years 1960 to 1963. Pheasant breeders in Iowa varied in level of education, background, and employment. No persons depended upon a pheasant farm to supply their entire livelihood. Most operators reared pheasants as a hobby, for local stocking, or for home food consumption. A few sold birds to food processors and to commercial shooting preserves.

### INTRODUCTION

An investigation of pheasant farms in Iowa was conducted from 1960 to 1963. Little was known about pheasant farms under private ownership in Iowa previous to our investigation. This study attempted to locate all pheasant farms in the state, and to study their distribution, size, annual production and number of years of operation.

<sup>1</sup> Journal Paper No. J-5122 of the Iowa Agricultural and Home Economics Experiment Station, Ames, Iowa. Project No. 1390. Jointly financed by the Iowa Cooperative Wildlife Research Unit, the Bureau of Sport Fisheries and Wildlife (U. S. Dept. Interior), Iowa State University of Science and Technology, Iowa State Conservation Commission, and the Wildlife Management Institute.

<sup>2</sup> Graduate Assistant, Iowa State University, Ames.

<sup>3</sup> Professor, Dept. Entomology and Wildlife, Iowa State University, Ames.

Individuals licensed as game breeders by the Iowa Conservation Commission were called pheasant breeders if they owned or reared pheasants during any calendar license period. A pheasant flock was defined as any number of pheasants owned by a pheasant breeder. The location of a pheasant flock, urban or rural, owned by a pheasant breeder was termed a pheasant farm.

All pheasant farms in Iowa are under private ownership with the exception of the Iowa State Wildlife Research and Exhibit Station, Boone, Iowa, which is operated by the Iowa State Conservation Commission.

Pheasant breeders in Iowa concentrate on rearing pheasants for hobby, local stocking, for home food consumption, and for sale to food processors, game breeders and shooting preserves. Pheasant breeders are not to be confused with individuals holding game breeding and shooting preserve licenses and who concentrate on commercial pay shooting of pheasants and, in a few cases, on rearing birds for hunting. Iowa shooting preserve operators now tend to concentrate on shooting birds, leaving the problem of pheasant production to pheasant breeders. Shooting preserves and commercial food processors can provide a large demand for game farm pheasants; however, the requirements imposed by these groups are varied and exacting. The majority of Iowa pheasant breeders are making no attempt to provide birds for these outlets at the present time.

During the past 30 years, the number of private licensed game breeders in Iowa has remained fairly constant. Since 1935, the annual license sales ranged from 371 in 1943 to 699 in 1957. In 1934, a record 2,214 permits were sold to Iowa game breeders. The 1936 biennial report of the Iowa Conservation Commission explained that the large variation in license sales from 1934 to 1935 occurred when the use of live duck decoys was discontinued. When the use of live decoys was no longer legal, large numbers of hunters had no further need for game-breeding licenses. No published records are available on game breeding in Iowa previous to 1934.

Iowa's largest game farm during the past 30 years was the Iowa State Game Farm at Boone, Iowa (now called Iowa Wildlife Research and Exhibit Station). Some 45,000 pheasant chicks were produced here in 1940, and the numbers have gradually decreased to 3,500 in 1961. No pheasants were reared by the Conservation Commission in 1962, and the propagation program has operated on only a limited basis since. In 1932, the State game farm was discontinued for a time. The 1938 biennial report of the Iowa Conservation Commission states that from 1932-1938 the Commission depended upon private game

breeders to supply any parent stock "necessary" for release in Iowa. The need for parent stock was limited until about 1935 when a series of unfavorable drought years coupled with the severe winter of 1935-36, reduced pheasant populations. The hunting season was closed in 1936-37, but poor production the following spring kept the population at low levels, and a new parent stock introduction program was undertaken.

The Conservation Commission purchased 866 pheasants from private game breeders in 1934, 430 birds in 1935, 3766 in 1936, and 293 in 1937. The 1938 biennial report stated that the Commission was having difficulty in securing birds from private sources for stocking. The report added that a state game bird hatchery would be necessary to "insure good, healthy, disease-free birds." Private breeders apparently supplied too few birds of high quality; therefore, in 1938, the Commission produced 11,462 pheasant chicks from parent stock captured in northern Iowa during the winter of 1937-38. Since 1938, the Conservation Commission depended on state facilities to produce pheasants for stocking programs, and few birds were purchased from private breeders.

#### METHODS

Information on pheasant farms in Iowa was collected by correspondence with pheasant breeders, by visits to pheasant farms in all parts of the state, and by analysis of annual reports filled with the Iowa Conservation Commission by game breeders.

Annual licenses are issued to game breeders each spring. If a game farm operated during the previous year, the breeder submitted a summary of his activities when a new license was requested. Reports were received from 70-80% of each year's breeders during the 4-year study. Reports are generally not received from individuals licensed for the past year who do not renew their game breeding permit. Only about 2 of each 5 licensed game breeders reared pheasants; the remaining breeders reared various other species such as skunks, raccoons, waterfowl, etc. (Table 1). Reports filed by pheasant breeders varied in the amount of information contained. A few neglected to indicate location of their game farm; some omitted information on flock size and production. The summary of information presented here was based on the total number of pheasant farms for which a particular type of information was available. It will be noted that the number of pheasant flocks represented as a total number varied slightly in some tables due to this factor. The authors summarized data on game farm numbers, distribution, and total production by latitude as well as by geographical location. A convenient method of latitudinal summation was from

north to south by rows or tiers of counties, with the Iowa counties bordering Minnesota referred to as tier one, and the tier of counties bordering Missouri referred to as tier nine.

Table 1. The number of licensed Iowa game breeders who reared pheasants between 1960 and 1963

Year	Number game breeders	Number pheasant producers	Per cent pheasant producers
1960	593	120	20
1961	586	124	21
1962	467	121	26
1963	503	112	22
Total	2149	477	
Average	537	119	22

### RESULTS

*Production.* Pheasant farms were located in 77 of Iowa's 99 counties in 1960-63. The majority of pheasant flocks were located in the Des Moines River Valley, the Mississippi River Valley, and the two southernmost tiers of counties (Figs. 1-2).

The general location of pheasant farms changed little from year to year, although the individual breeders changed a good deal. Pheasant farms tabulated by tier of counties indicated 68% of the pheasant farms were located in the southern 4 tiers of counties, from Des Moines southward to the Missouri state line (Table 2). A tabulation of the number of pheasants reared by tiers of Iowa counties (Fig. 3) indicates that 74% of the 84,943 pheasants were owned by breeders in the 4 southern tiers of counties (Table 2). Three large game farms in southern Iowa produced 47,113 (55%) of all pheasants reared from 1960-63. Game breeders in northern Iowa produced 26% of the pen-reared pheasants during the study period. Breeders in the second tier of counties below the Minnesota border produced 21% of these pheasants (17,380 birds). The majority of pheasants in this group were reared by two pheasant breeders. All farms in the remaining 4 tiers of Iowa counties produced 5% (4,797 birds) of the pheasants reared from 1960-63.

The reasons for this concentration of pheasant farms and birds in southern Iowa were not all evident; however, this part of the state supports a relatively small wild population of pheasants and this may be one reason for the local interest resulting in large numbers of penned pheasants.

During the study, 72% of the operators reared fewer than 30 pheasants (Table 3). Pheasant farms with fewer than 100 birds were considered small operations. This group included 88% of the operators and produced 9% of the pheasants (Table 4). Pheasant farms producing more than 500 birds were classed as

Table 2. Total numbers of pheasants and pheasant flocks in Iowa classified by year of operation and north to south distribution by tier of counties.

Tier of counties	1960				1961				1962				1963				Total			
	Flocks No.	%	Pheasants No.	%	Flocks No.	%	Pheasants No.	%	Flocks No.	%	Pheasants No.	%	Flocks No.	%	Pheasants No.	%	Flocks No.	%	Pheasants No.	%
N. Iowa 1	8	7	212	2	6	5	391	1	3	2	59	1	7	6	113	1	24	5	775	1
2	7	6	1,387	15	6	5	3,069	11	6	5	8,454	31	6	5	4,470	24	25	5	17,380	21
3	11	9	114	1	7	6	387	1	7	6	272	1	7	6	431	2	32	7	1,204	1
4	7	6	47	1	6	5	332	1	9	8	321	1	8	7	93	1	30	6	793	1
5	11	9	373	4	8	7	285	1	11	9	940	3	10	9	427	2	40	9	2,025	2
6	21	18	1,478	16	22	18	2,278	8	21	17	956	3	21	19	917	5	85	18	5,629	7
7	18	15	2,590	28	20	16	2,704	9	25	21	6,234	23	24	22	4,067	21	87	18	15,595	18
8	20	16	1,694	18	29	24	17,396	59	21	17	9,677	35	15	14	8,048	42	85	18	36,815	43
S. Iowa 9	17	14	1,334	15	18	14	2,567	9	18	15	464	2	13	12	362	2	66	14	4,727	6
Total	120	100	9,229	100	122*	100	29,409	100	121	100	27,377	100	111*	100	18,928	100	474	100	84,943	100

\* Data on location not available for 2 farms in 1961 and 1 in 1963.

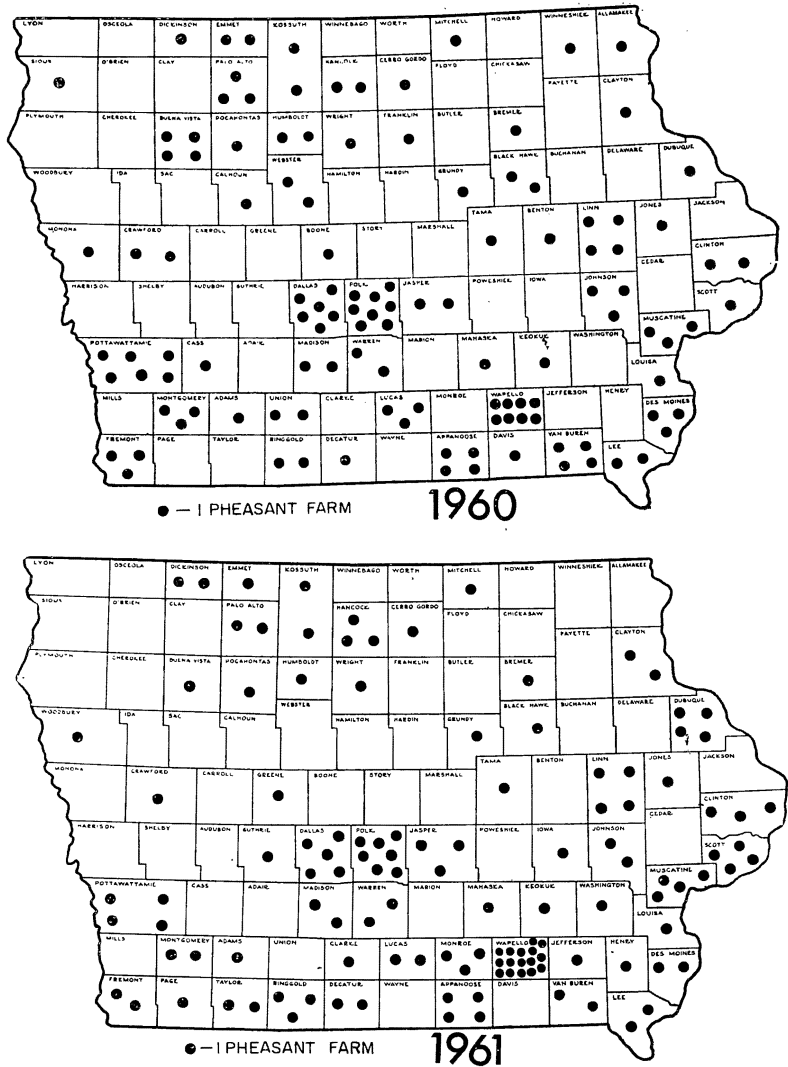


Figure 1. Location of pheasant farms under private ownership in 1960-1961.

large operations. This group included 5% of the operators and produced 82% of the pen-reared pheasants (Table 3 and 4). If

Table 3. The distribution of pheasant farms by flock size and year of operation, 1960-1963.

Flock size	1960 Farms	1960 %	1961 Farms	1961 %	1962 Farms	1962 %	1963 Farms	1963 %	Total farms	Average	%
1-30	94	77	81	68	81	67	78	71	334	84	72
31-100	15	13	20	16	21	17	21	19	77	19	16
101-250	2	2	7	6	9	8	4	4	22	6	5
251-500	3	3	4	3	2	2	1	1	10	3	2
501-1000	3	3	3	3	3	3	2	2	11	3	2
1001	2	2	5	4	4	3	3	3	14	4	3
Total	119	100	120	100	120	100	109	100	468	117	100

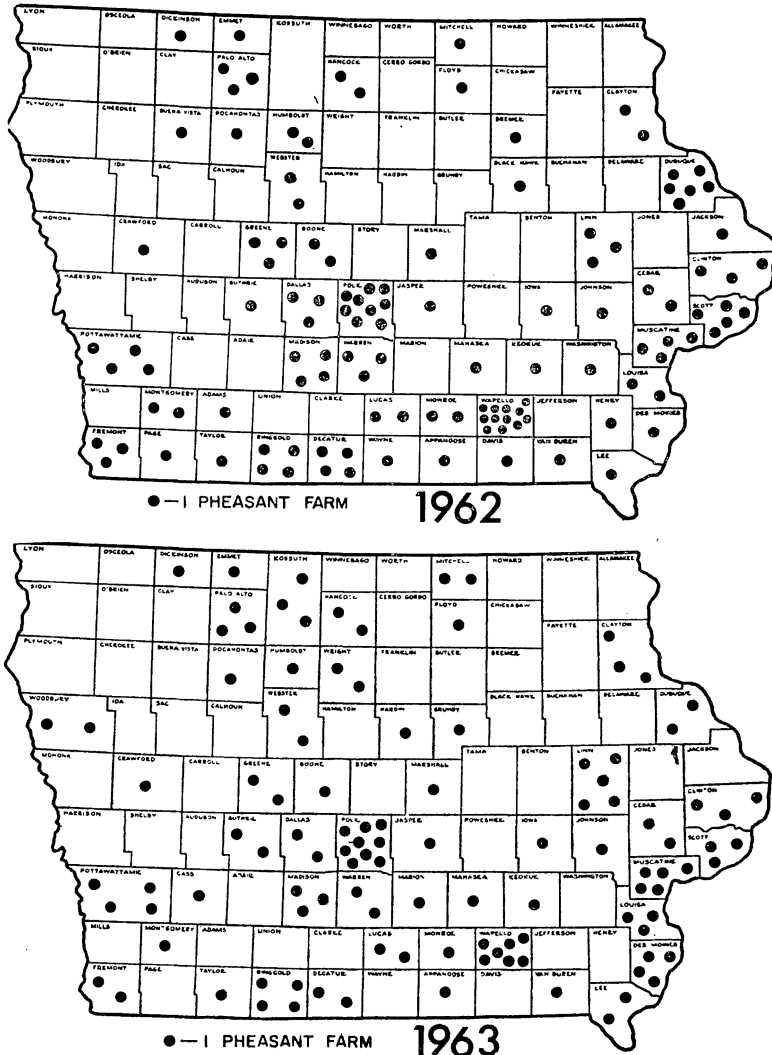


Figure 2. Location of pheasant farms under private ownership in 1962-1963.

Table 4. Total number of game farm pheasants classified by flock size and year of operation.

	1960		1961		1962		1963		Total	Average
Flock size	Pheas-ants	%	Pheas-ants	%	Pheas-ants	%	Pheas-ants	%	Pheas-ants	%
1-30	879	10	882	3	800	3	728	4	3,289	822
31-100	834	9	1,229	4	1,254	5	1,219	6	4,536	1,134
101-250	317	3	1,364	5	1,525	6	794	4	4,000	1,000
251-500	899	10	1,261	4	628	2	330	2	3,118	780
501-1000	2,800	30	1,961	7	2,086	8	1,471	8	8,313	2,080
1001	3,500	38	22,712	77	21,084	76	14,386	76	61,682	15,421
Total	9,229	100	29,409	100	27,377	100	18,928	100	84,943	21,236
										100



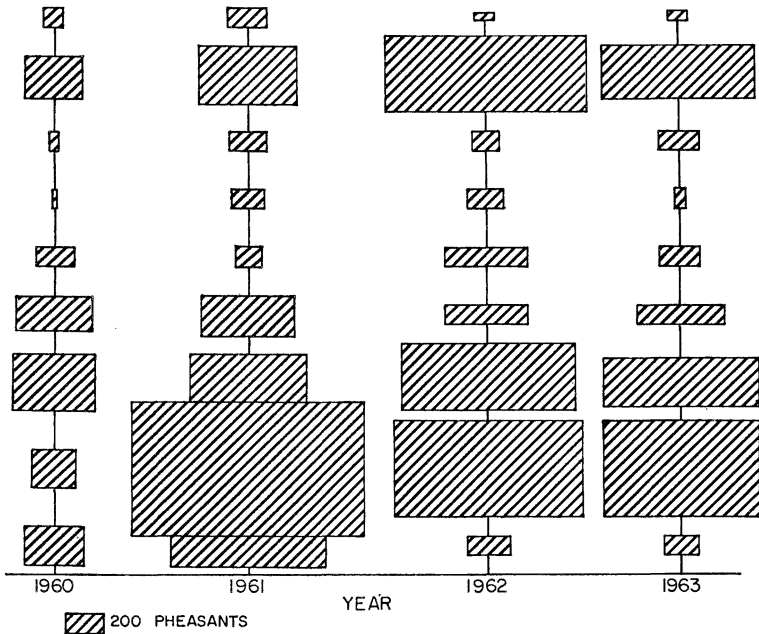


Figure 3. Relative north to south distribution by tiers of counties of the total number of game farm pheasants in 1960, 1961, 1962, 1963.

a breeder reared fewer than 30 pheasants, his interests generally were those of a hobbyist or of providing pheasants for family consumption.

Many individuals with small pheasant flocks gave no reason for keeping pheasants except that they enjoyed seeing some on their property. A few thought any pheasants they released helped to establish wild populations in their area. The idea was most often expressed by breeders in southern Iowa where wild pheasant populations are low.

Individuals who reared large numbers of pheasants sold most of their birds to shooting preserves, for feld trials, and to commercial food processors. Some pheasants were sold as replacement stock to smaller operators in Iowa and neighboring states.

*Turnover in Breeders.* Pheasant farms were operated by 254 individuals during the study period (Table 5). The majority of breeders (51%) operated during only one of the years in the 4-year period, indicating a rapid turnover of breeders. Only 31 individuals (12%) reared pheasants throughout the study. This high turnover indicated that large numbers of pheasant breeders in Iowa probably had little experience rearing pheasants. An average of 43% of the operators in any 1 year (1960-62) reared pheasants for the first time (Table 6). Some 44% of the licensed

pheasant breeders did not keep pheasants in the following year from 1960-1962. Most operators who reared pheasants for only 1 year kept only a small flock (1-30 birds) (Table 5). Pheasants were reared throughout the 4-year study by only 10% of the small-flock owners. Four of the eight large pheasant farms operated during the entire period and four operated for 1 year each (Table 5).

Table 5. Classification of 254 pheasant farms by flock size and years of operation.

Number years operated	1-30 Farms %		31-100 Farms %		101-250 Farms %		Flock size 251-500 Farms %		501-1000 Farms %		1001 Farms %		Total Farms %	
1	102	55	18	41	4	33	2	50	2	67	2	40	130	51
2	43	23	10	23	5	42	1	25	0	0	0	0	59	23
3	22	12	8	18	3	25	1	25	0	0	0	0	34	14
4	19	10	8	18	0	0	0	0	1	33	3	60	31	12
Total	186	100	44	100	12	100	4	100	3	100	5	100	254	100

Table 6. The number of relicensed and new pheasant breeders who operated in Iowa 1960, 1961, 1962, 1963

Year	Number farms	Relicensed operators Number	Relicensed operators %	New operators Number	New operators %	Operators quitting Number	Operators quitting %
1960	120	Data not available for 1960				58	48
1961	124	62	50	62	50	57	46
1962	121	67	55	54	45	46	38
1963	112	75	67	37	33	Data not available	
Total	477	204		153		161	
Average	119	68	57	51	43	54	44

Large numbers of pheasants were reared by two sportsmen's clubs during 1 year of the study. These birds were released into the wild and the clubs discontinued their pheasant stocking projects.

The predominance of small-type operators (1-30 birds) among the 254 individual pheasant breeders was evident in all 4 years. The largest number of individual breeders who operated for a single year occurred in 1960 when 17% of all breeders licensed in the study period reared pheasants. The number of pheasant breeders who operated all 4 years comprised 12% of the total number of individual pheasant breeders. Some of the problems breeders experienced with pheasants were undoubtedly caused by the large number of breeders (43%) who were new operators during any given year (Table 6).

Pheasant breeders in Iowa varied in level of education, background, and employment. No breeders depended upon a pheasant farm to supply their entire livelihood. The larger operations were more profitable, but their owners usually combined these with agricultural operations. As expected, the operators of the largest farms appeared the best managers and gave more attention to marketing birds before they were produced. Small operators usually kept pheasants for less than 1 year, while large operators over-wintered their own brood stock. New

breeders usually purchased eggs or a few adult birds in the spring and kept them the remainder of the year.

The most common and rapid method of going out of the pheasant business apparently was to release birds into the wild. All 80 pheasant breeders visited had released some birds into the wild during 1960-63. This practice was generally deliberate with small operators, and incidental on large pheasant farms.

A large release by one private breeder, in addition to the sportsmen's clubs already mentioned, occurred when the breeder produced some 500 pheasants for which he found no market. The problem was solved by releasing the birds on farms where the breeder had permission to hunt that fall.

The total number of pheasant breeders remained fairly constant each year during the study, although the number of individuals who kept pheasants varied considerably. This pattern is not expected to change in the next several years. Shooting preserves and commercial markets will increase their demands for pheasants as our human population grows. If pheasant breeders meet this demand, the program will probably expand in Iowa. Increased amounts of leisure time may provide an opportunity for more game bird hobbyists and game farms in Iowa.

#### ACKNOWLEDGMENTS

The authors acknowledge the assistance of D. Criswell, Superintendent of the License Section of the Iowa State Conservation Commission, for making game breeder report forms available for detailed analysis. The authors thank the many pheasant breeders in Iowa who cooperated in the postal questionnaire survey and by taking time out from other duties to visit with the authors.

#### Literature Cited

- Iowa State Conservation Commission. 1936. Report for the biennium ending June 30, 1936. Des Moines, Iowa, The State of Iowa.
- , 1938. Report for the biennium ending June 30, 1938. Des Moines, Iowa, The State of Iowa.
- , 1940. Report for the biennium ending June 30, 1940. Des Moines, Iowa, The State of Iowa.
- , 1959. Report for the biennium ending June 30, 1958. Des Moines, The State of Iowa.
- , 1962. Report for the biennium ending June 30, 1962. Des Moines, The State of Iowa.